U.S. Census Bureau For Data - (301) 457-4673 For Questions - Dan Sansbury or Derrick Roy (301) 763-4832 or (301) 763-4814 M3-1(02)-8 For Release 8:30 A.M. EDT September 26, 2002 CB-02-126

## ADVANCE REPORT ON DURABLE GOODS MANUFACTURERS' SHIPMENTS, INVENTORIES, AND ORDERS August 2002

(All figures in text below are in seasonally adjusted current dollars and exclude data for semiconductor manufacturing)

• NEW ORDERS for manufactured durable goods in August decreased \$1.0 billion or 0.6 percent to \$178.4 billion, the Department of Commerce, U.S. Census Bureau reported today. This followed an 8.6 percent July increase. Excluding transportation, new orders decreased 0.9 percent. Excluding defense, new orders increased 0.6 percent. Year to date, new orders for 2002 were 1.2 percent below the same period a year ago.

Fabricated metal products had the largest decrease, \$0.7 billion or 3.5 percent to \$20.5 billion. Machinery, due to industrial machinery manufacturing, decreased \$0.6 billion or 2.5 percent to \$22.5 billion.

• SHIPMENTS of manufactured durable goods in August decreased \$2.4 billion or 1.3 percent to \$176.5 billion. This followed a 3.3 percent July increase. Year to date, shipments for 2002 were 2.0 percent below the same period a year ago.

Transportation equipment had the largest decrease, \$1.8 billion or 3.3 percent to \$53.1 billion, led by motor vehicles and parts which decreased \$0.9 billion and by nondefense aircraft and parts which also decreased by \$0.9 billion.

• UNFILLED ORDERS for manufactured durable goods in August increased \$1.9 billion or 0.4 percent to \$490.9 billion. This followed a 0.1 percent July increase.

Transportation equipment had the largest increase, \$4.3 billion or 1.7 percent to \$254.4 billion, due to nondefense aircraft and parts which increased \$3.5 billion. Fabricated metal products decreased \$0.8 billion and machinery decreased \$0.7 billion.

• INVENTORIES of manufactured durable goods in August, down nineteen consecutive months, decreased \$0.5 billion or 0.2 percent to \$264.0 billion. This followed a 0.4 percent July decrease.

Computers and electronic products had the largest decrease, \$0.2 billion or 0.5 percent to \$42.8 billion, due to communications equipment which decreased \$0.2 billion. Machinery also decreased \$0.2 billion or 0.4 percent to \$44.8 billion.

- CAPITAL GOODS INDUSTRIES, DEFENSE New orders in August increased \$1.6 billion or 28.9 percent to \$7.1 billion. Shipments increased 0.4 percent to \$6.5 billion. Unfilled orders increased \$0.6 billion or 0.5 percent to \$125.4 billion. Inventories increased \$0.5 billion or 2.7 percent to \$18.5 billion.
- CAPITAL GOODS INDUSTRIES, NONDEFENSE New orders in August increased \$3.4 billion or 5.9 percent to \$60.5 billion. Shipments decreased \$1.0 billion or 1.7 percent to \$57.4 billion. Unfilled orders increased \$3.0 billion or 1.4 percent to \$216.0 billion, this was the first increase since January 2001. Inventories, down nineteen consecutive months, decreased \$0.9 billion or 0.8 percent to \$114.1 billion.
- REVISED JULY DATA Revised seasonally adjusted July figures for all manufacturing industries are: new orders, \$326.7 billion (revised from \$327.6 billion); shipments, \$326.1 billion (revised from \$325.9 billion); unfilled orders, \$489.0 billion (revised from \$490.1 billion); and total inventories, \$427.9 billion (revised from \$427.8 billion).

## SEE BACK PAGE FOR SURVEY DESCRIPTION

Our internet site address is: http://www.census.gov/indicator/www/m3

Table 1. Durable Goods Manufacturers' Shipments and New Orders [Millions of Dollars]

ltem	Seasonally Adjusted  Monthly Percent Change							Percent		
	Aug 2002 <sup>2</sup>	Jul 2002 <sup>r</sup>	Jun 2002	Jul - Aug <sup>2</sup>	Jun - Jul <sup>r</sup>	May - Jun	Aug 2002 <sup>2</sup>	Jul 2002 <sup>r</sup>	Aug 2001	Change Aug 02/01
DURABLE GOODS										
Total: <sup>4</sup> Shipments New Orders	176,473	178,855	173,205	-1.3	3.3	-1.5	179,145	153,420	178,600	0.3
	178,364	179,409	165,261	-0.6	8.6	-4.5	177,772	154,063	170,755	4.1
Excluding transportation: <sup>4</sup> Shipments New Orders	123,409	123,957	121,689	-0.4	1.9	-1.6	123,886	114,794	124,848	-0.8
	120,978	122,132	118,430	-0.9	3.1	-3.9	119,414	114,108	120,486	-0.9
Excluding defense: <sup>4</sup> Shipments New Orders	168,721	171,131	165,183	-1.4	3.6	-1.9	171,657	146,623	171,813	-0.1
	169,933	168,975	157,891	0.6	7.0	-5.3	171,073	146,528	166,555	2.7
Manufacturing with unfilled orders: <sup>4</sup> Shipments New Orders	122,819	123,861	121,501	-0.8	1.9	-1.0	123,508	108,358	125,226	-1.4
	124,710	124,415	113,557	0.2	9.6	-5.3	122,135	109,001	117,381	4.1
Primary metals: Shipments New Orders	11,408	11,356	11,206	0.5	1.3	-0.9	11,802	10,655	11,868	-0.6
	11,412	11,203	11,119	1.9	0.8	-2.8	11,652	10,416	11,456	1.7
Fabricated metal products: Shipments	21,244	21,357	21,029	-0.5	1.6	-0.1	22,153	20,340	22,536	-1.7
	20,486	21,219	20,651	-3.5	2.8	-3.1	21,050	21,040	22,059	-4.6
Machinery: Shipments New Orders	23,206	23,261	22,936	-0.2	1.4	-2.5	22,415	21,152	23,241	-3.6
	22,460	23,027	20,863	-2.5	10.4	-8.4	21,651	21,158	22,726	-4.7
Computers and electronic products: <sup>4</sup> Shipments New Orders	26,867	27,033	26,126	-0.6	3.5	-2.8	25,285	23,063	24,721	2.3
	26,375	26,457	25,542	-0.3	3.6	-4.6	23,524	21,946	22,320	5.4
Computers and related products: Shipments New Orders	6,769	7,085	6,252	-4.5	13.3	-5.0	6,004	5,688	5,375	11.7
	6,685	6,783	5,991	-1.4	13.2	-9.7	6,000	5,278	5,558	8.0
Communications equipment: Shipments New Orders	5,444	5,447	5,573	-0.1	-2.3	-4.9	4,971	4,579	6,075	-18.2
	5,317	5,541	5,075	-4.0	9.2	-15.6	3,831	4,393	4,166	-8.0
Semiconductors: <sup>5</sup> Shipments New Orders	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electrical equipment, appliances, and components:  Shipments	8,978	9,106	9,012	-1.4	1.0	-2.0	8,923	8,177	9,858	-9.5
New Orders  Transportation equipment:	8,897	8,638	9,225	3.0	-6.4	-1.3	8,791	8,066	9,568	-8.1
ShipmentsNew Orders	53,064	54,898	51,516	-3.3	6.6	-1.4	55,259	38,626	53,752	2.8
	57,386	57,277	46,831	0.2	22.3	-6.0	58,358	39,955	50,269	16.1
Motor vehicles and parts: Shipments New Orders	39,240	40,174	37,122	-2.3	8.2	-2.8	41,735	26,760	39,163	6.6
	38,819	40,366	37,230	-3.8	8.4	-3.0	41,037	27,180	38,855	5.6
Nondefense aircraft and parts: Shipments New Orders	5,649	6,549	6,145	-13.7	6.6	-1.7	5,315	5,066	7,412	-28.3
	9,108	6,182	2,663	47.3	132.1	-48.9	8,881	4,943	6,473	37.2
Defense aircraft and parts: Shipments New Orders	2,944	3,142	3,154	-6.3	-0.4	7.6	2,909	2,683	2,458	18.3
	3,144	6,212	2,620	-49.4	137.1	17.6	2,341	5,079	1,087	115.4
All other durable goods: Shipments New Orders	31,706	31,844	31,380	-0.4	1.5	-1.0	33,308	31,407	32,624	2.1
	31,348	31,588	31,030	-0.8	1.8	-1.7	32,746	31,482	32,357	1.2
Capital goods: <sup>3</sup> Shipments New Orders	63,924	64,905	63,027	-1.5	3.0	-1.4	61,530	57,056	62,788	-2.0
	67,549	62,607	57,034	7.9	9.8	-7.2	62,734	53,714	56,680	10.7
Nondefense capital goods: Shipments New Orders	57,428 60,477	58,436 57,119	56,314 50,774	-1.7 5.9	3.8 12.5	-2.2 -9.6	55,301 57,049	51,265 50,268	56,723 52,881	-2.5 7.9
Excluding aircraft: Shipments New Orders	54,810 54,310		53,312 50,438	-0.4 0.6	3.2 7.0	-2.1 -6.3	52,887 51,086	48,758 48,056	52,956 49,976	-0.1 2.2
Defense capital goods: Shipments New Orders	6,496 7,072	6,469 5,488	6,713 6,260	0.4 28.9	-3.6 -12.3	6.3 18.3	6,229 5,685	5,791 3,446	6,065 3,799	2.7 49.6

NA Not Available Revised

<sup>1</sup> Shipments and new orders are the totals for the period and are adjusted for trading-day and calendar-month variations; unfilled orders and total inventories are as of the end of the period and are not adjusted for trading-day or calendar-month variations.

<sup>&</sup>lt;sup>2</sup> Based on advance sample. Estimates of manufacturers' shipments, inventories, and orders are subject to survey error and revision. One major component of survey error is nonsampling error, which include errors of coverage, response and nonreporting. Since the survey panel is not a probability sample, estimates of sampling error cannot be calculated. Further details on survey design, methodology, and data limitations are contained in our most recent annual benchmark publication, Current Industrial Reports: M3-1(01), "Manufacturers' Shipments, Inventories, and Orders: 1992-2001."

<sup>&</sup>lt;sup>3</sup> The Capital Goods Industries include Nondefense: small arms and ordnance; farm machinery and equipment; construction machinery; mining, oil, and gas field machinery; industrial machinery; vending, laur and other machinery; photographic equipment; metalworking machinery; turbines and generators; other power transmission equipment; pumps and compressors; material handling equipment; all other machine electronic computers; computer storage devices; other computer peripheral equipment; communications equipment; search and navigation equipment; electromedical, measuring, and control instruments; electrical equipment; other electrical equipment, appliances, and components; heavy duty trucks; aircraft; railroad rolling stock; ships and boats; office and institutional furniture; and medical equipment and supplies.

<sup>&</sup>lt;sup>4</sup> Aggregate estimates and percent changes exclude semiconductor industry data. Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or inventories.

<sup>&</sup>lt;sup>5</sup> Due to the number of large semiconductor manufacturers choosing not to participate in this voluntary monthly survey, the Census Bureau cannot currently produce monthly estimates of semiconductor shipments, orders, or inventories.

Defense Capital Goods include: small arms and ordnance, communications equipment, aircraft; missiles, space vehicles, and parts, ships and boats, and search and navigation equipment.

Table 2. Durable Goods Manufacturers' Unfilled Orders and Total Inventories [Millions of Dollars]

ltem	Seasonally Adjusted  Monthly Percent Change					Not Seasonally Adjusted 1				
	Aug 2002 <sup>2</sup>	Jul 2002	Jun 2002	Jul - Aug <sup>2</sup>	Jun - Jul <sup>r</sup>	May - Jun	Aug 2002 <sup>2</sup>	Jul 2002 <sup>r</sup>	Aug 2001	Percent Change Aug 02/01
DURABLE GOODS										
Total: <sup>4</sup> Unfilled Orders Total Inventories	490,874	488,983	488,429	0.4	0.1	-1.6	488,818	490,191	518,727	-5.8
	263,982	264,461	265,478	-0.2	-0.4	-0.4	267,273	266,067	291,555	-8.3
Excluding transportation: <sup>4</sup> Unfilled OrdersTotal Inventories	236,458	238,889	240,714	-1.0	-0.8	-1.3	235,719	240,191	261,632	-9.9
	192,588	193,051	193,085	-0.2	0.0	-0.6	194,443	193,923	215,095	-9.6
Excludina defense: <sup>4</sup> Unfilled OrdersTotal Inventories	344,790	343,578	345,734	0.4	-0.6	-2.1	345,060	345,644	389,456	-11.4
	242,002	242,944	243,066	-0.4	-0.1	-0.5	244,586	244,350	269,487	-9.2
Manufacturing with unfilled orders: <sup>4</sup> Unfilled OrdersTotal Inventories	490,874	488,983	488,429	0.4	0.1	-1.6	488,818	490,191	518,727	-5.8
	215,104	215,320	216,405	-0.1	-0.5	-0.4	217,797	216,651	238,903	-8.8
Primary metals: Unfilled Orders Total Inventories	15,930	15,926	16,079	0.0	-1.0	-0.5	16,016	16,166	17,961	-10.8
	18,449	18,304	18,282	0.8	0.1	0.7	18,526	18,330	19,992	-7.3
Fabricated metal products: Unfilled Orders Total Inventories	38,729	39,487	39,625	-1.9	-0.3	-0.9	39,423	40,526	43,513	-9.4
	30,573	30,571	30,494	0.0	0.3	-0.6	30,648	30,822	33,255	-7.8
Machinery: Unfilled Orders Total Inventories	47,220	47,966	48,200	-1.6	-0.5	-4.1	47,168	47,932	55,809	-15.5
	44,775	44,977	45,063	-0.4	-0.2	-0.9	45,019	44,869	48,963	-8.1
Computers and electronic products: <sup>4</sup> Unfilled Orders Total Inventories	110,987	111,479	112,055	-0.4	-0.5	-0.5	109,343	111,104	118,238	-7.5
	42,789	43,016	42,992	-0.5	0.1	-1.7	44,114	43,697	53,984	-18.3
Computers and related products: Unfilled OrdersTotal Inventories	6,180	6,264	6,566	-1.3	-4.6	-3.8	6,280	6,284	7,504	-16.3
	6,744	6,906	7,054	-2.3	-2.1	-0.1	7,194	7,063	8,840	-18.6
Communications equipment: Unfilled Orders Total Inventories	41,602	41,729	41,635	-0.3	0.2	-1.2	40,227	41,367	44,412	-9.4
	10,050	10,261	10,127	-2.1	1.3	-2.5	10,243	10,357	14,623	-30.0
Semiconductors: <sup>5</sup> Unfilled Orders Total Inventories	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Electrical equipment, appliances, and components: Unfilled Orders	14,490	14,571	15,039	-0.6	-3.1	1.4	14,552	14,684	15,805	-7.9
Total Inventories  Transportation equipment: Unfilled Orders	12,908	13,052	13,103	-1.1	-0.4	-0.3	12,850	13,011	13,997	-8.2
	254,416	250,094	247,715	1.7	1.0	-1.9	253,099	250,000	257,095	-1.6
Total Inventories	71,394 12,549	71,410 12,970	72,393 12,778 20,315	-3.2 -1.1	-1.4 1.5	0.3	72,830 12,277	72,144 12,975	76,460 12,551	-4.7 -2.2 -4.1
Total Inventories.  Nondefense Aircraft and parts: Unfilled Orders Total Inventories	20,243 116,109	20,468 112,650	113,017	3.1	-0.3	-3.0	20,643 116,831	21,032 113,265	21,517 135,919	-14.0 -9.9
Defense Aircraft and parts: Unfilled Orders	29,592 58,060 10,903	29,735 57,860 10,611	30,094 54,790 10,853	-0.5 0.3 2.8	-1.2 5.6 -2.2	-0.6 -1.0 2.2	29,957 57,396 11,372	29,703 57,964 10,665	33,235 41,187 10,401	
Total Inventories	9,102 43,094	9,460 43,131	9,716 43,151	-3.8 -0.1	-2.2 -2.6 0.0	-3.5 0.2	9,217 43,286	9,779 43,194	10,306 44,904	-10.6 -3.6
Capital goods: <sup>3</sup> Unfilled Orders	341,368	337,743	340,041	1.1	-0.7	-1.7	338,090	336,886	360,700	-6.3
	132,621	133,025	134,537	-0.3	-1.1	-0.5	134,730	133,573	151,140	-10.9
Nondefense capital goods: Unfilled Orders	215,969	212,920	214,237	1.4	-0.6	-2.5	214,828	213,080	248,149	-13.4
	114,090	114,983	115,653	-0.8	-0.6	-0.7	115,668	115,371	132,017	-12.4
Excluding aircraft: Unfilled Orders Total Inventories	129,401	129,901	130,923	-0.4	-0.8	-2.1	128,260	130,061	144,939	-11.5
	91,097	91,847	91,946	-0.8	-0.1	-0.9	92,341	92,249	105,097	-12.1
Defense capital goods: Unfilled Orders Total Inventories	125,399 18,531	124,823 18,042	125,804 18,884	0.5 2.7	-0.8 -4.5	-0.4 0.8	123,262 19,062	123,806 18,202	112,551 19,123	9.5 -0.3

See footnotes at end of Table 1

## **Survey Description**

This report is compiled from results of the U.S. Census Bureau's Manufacturers' Shipments, Inventories, and Orders (M3) survey. This survey provides statistics on manufacturers' value of shipments, new orders (net of cancellations), end-of-month order backlog (unfilled orders), and end-of-month total inventory (at current cost or market value). The M3 includes approximately 5,000 reporting units. Units may be divisions of diversified large companies, large homogenous companies, or single-unit manufacturers in 89 industry categories. Due to the small monthly sample, these 89 categories have been combined into 59 publication levels. The survey methodology assumes that the month-to-month changes of the total operations of those companies in the monthly survey effectively represent the month-to-month movements of all establishments that make up the category. The current coverage levels in the survey show that reported data in the monthly survey represent approximately 60 percent of the shipments estimates at the total manufacturing level. Data published represent manufacturing in a calendar month. The data collection is based on a voluntary survey authorized by Title 13 of the United States Code.

The data presented in this release are based on data obtained from a panel of 5,000 reporting units and provide an indication of the activity within the manufacturing sector. The results differ from what would be obtained from a complete enumeration of all manufacturing companies. In addition, a different panel of 5,000 companies would yield different results. The M3 panel is comprised of companies with \$500 million or more in shipments and a limited number of smaller companies. From a statistical perspective, the panel is not a probability sample, therefore, the sampling errors that are normally provided with sample surveys cannot be measured. Nonsampling errors are attributable to many sources. The use of company or divisional reports to estimate the monthly change for establishments is one source of nonsampling error. The use of primarily large companies to represent the month-to-month movement of all companies is another potential source.

Additional survey documentation can be found on our web site: http://www.census.gov/indicator/www/m3/.